

AMENDMENTS TO THE CLAIMS:

Please amend Claims 1-22 as indicated below. This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A simulation circuit pattern evaluation method, comprising:

designing an aggregate of simulation circuit patterns, which simulate a circuit pattern of a semiconductor integrated circuit, by combining plural geometrical structure defining parameters including at least any one of a dummy wiring group formation position and an existence of a dummy via hole, the plural geometrical structure defining parameters respectively having at least two states, in such a manner that the respective states appear the same number of times in the respective geometrical structure defining parameters;

forming the aggregate of simulation circuit patterns on a substrate; and

evaluating the formed aggregate of the simulation circuit patterns,

wherein said forming includes forming the aggregate of the simulation circuit patterns on each of a plurality of the substrates with a process condition which is different for each of the substrates; and

wherein said evaluating includes separately evaluating the aggregate of the simulation circuit patterns on each of the substrates.

2. (Cancelled)

3. (Cancelled)

4. (Original) The simulation circuit pattern evaluation method as set forth in claim 1,

wherein the geometrical structure defining parameters are parameters which define a geometrical structure of a wiring.

5. (Previously amended) The simulation circuit pattern evaluation method as set forth in claim 4,

wherein the parameters which define the geometrical structure of the wiring further include at least any one of a wiring formation width, a wiring formation length, a via hole formation position, and a wiring group formation length.

6. (Canceled)

7. (Canceled)

8. (Previously amended) A manufacturing method of a semiconductor integrated circuit, comprising:

designing an aggregate of simulation circuit patterns, which simulate a circuit pattern of a semiconductor integrated circuit, by combining plural geometrical structure defining parameters including at least any one of a dummy wiring group formation position and an existence of a dummy via hole, the plural geometrical structure defining parameters respectively having at least two states, in such a manner that the respective states appear the same number of times in the respective geometrical structure defining parameters;

forming the aggregate of the simulation circuit patterns on each of plural substrates with a process condition which is different for each of the substrate;

detecting a process condition which is suitable for the aggregate of the simulation circuit patterns by separately evaluating the formed aggregate of the simulation circuit patterns on each of the substrate; and

forming the circuit pattern with the detected process condition.

9. (Original) The manufacturing method of a semiconductor integrated circuit as set forth in claim 8,

wherein the geometrical structure defining parameters are parameters which define a geometrical structure of a wiring.

10. (Previously amended) The manufacturing method of a semiconductor integrated circuit as set forth in claim 9,

wherein the parameters which define the geometrical structure of the wiring further include at least any one of a wiring formation width, a wiring formation length, a via hole formation position, and a wiring group formation length.

11. (Canceled)

12. (Canceled)

13. (Previously amended) A test substrate, comprising:

an aggregate of simulation circuit patterns which is formed by combining plural geometrical structure defining parameters including at least any one of a dummy wiring group formation position and an existence of a dummy via hole, the plural geometrical structure defining parameters respectively having at least two states, in such a manner that the respective states appear the same number of times in the respective geometrical structure defining parameters, the aggregate of the simulation circuit patterns simulating a circuit pattern of a semiconductor integrated circuit.

14. (Original) The test substrate as set forth in claim 13,
wherein the geometrical structure defining parameters are parameters which
define a geometrical structure of a wiring.

15. (Previously amended) The test substrate as set forth in claim 14,
wherein the parameters which define the geometrical structure of the wiring
further include at least any one of a wiring formation width, a wiring formation length, a
via hole formation position, and a wiring group formation length.

16. (Canceled)

17. (Canceled)

18. (Previously amended) A test substrate group which is composed of plural test
substrates respectively including an aggregate of simulation circuit patterns which is
formed by combining plural geometrical structure defining parameters including at least
any one of a dummy wiring group formation position and an existence of a dummy via
hole, the plural geometrical structure defining parameters respectively having at least
two states, in such a manner that the respective states appear the same number of
times in the respective geometrical structure defining parameters, the aggregate of the
simulation circuit patterns simulating a circuit pattern of a semiconductor integrated
circuit, the aggregate of the simulation circuit patterns being formed with a process
condition which is different for each of the test substrate.

19. (Original) The test substrate group as set forth in claim 18,
wherein the geometrical structure defining parameters are parameters which
define a geometrical structure of a wiring.

20. (Previously amended) The test substrate group as set forth in claim 19,

wherein the parameters which define the geometrical structure of the wiring further include at least any one of a wiring formation width, a wiring formation length, a via hole formation position, and a wiring group formation length.

21. (Canceled)

22. (Canceled)